09/823,283

FILE 'HOME' ENTERED AT 13:06:38 ON 30 APR 2002

=> file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 13:06:47 ON 30 APR 2002
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

STRUCTURE FILE UPDATES: 29 APR 2002 HIGHEST RN 409058-68-0
DICTIONARY FILE UPDATES: 29 APR 2002 HIGHEST RN 409058-68-0

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

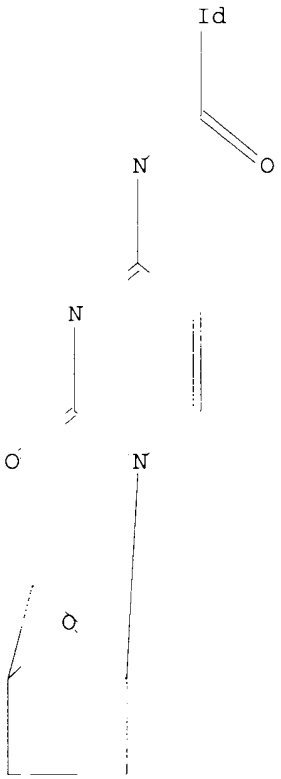
Calculated physical property data is now available. See HELP PROPERTIES
for more information. See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

*** YOU HAVE NEW MAIL ***

=>
Uploading 09823283_2.str

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



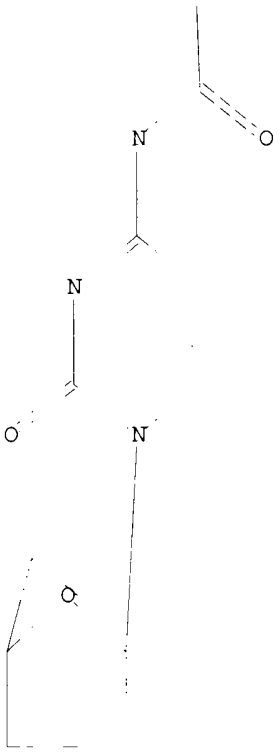
Structure attributes must be viewed using STN Express query preparation.

```
=> s l1 full\
COMBINATION OF STRUCTURE AND TEXT TERMS NOT VALID
The query entered contains both search terms created by
structure-building or screen commands and text search terms.  L#s
created via the STRUCTURE or SCREEN commands must be searched in the
structures files separately from text terms or profiles.  The L#
answer sets from structure searches can be used in crossover searches
and can be combined with text terms.

=>
=> s l1 full
FULL SEARCH INITIATED 13:07:18 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     291 TO ITERATE

100.0% PROCESSED     291 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

L2             0 SEA SSS FUL L1

=>
```

=>
Uploading 09823283_2.str

L3 STRUCTURE UPLOADED

=> d l3
L3 HAS NO ANSWERS
L3 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l3 full
FULL SEARCH INITIATED 13:08:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 262 TO ITERATE

100.0% PROCESSED 262 ITERATIONS 57 ANSWERS
SEARCH TIME: 00.00.01

L4 57 SEA SSS FUL L3

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	280.94	281.15

FILE 'CAPLUS' ENTERED AT 13:08:30 ON 30 APR 2002

FILE COVERS 1907 - 30 Apr 2002 VOL 136 ISS 18
FILE LAST UPDATED: 28 Apr 2002 (20020428/ED)

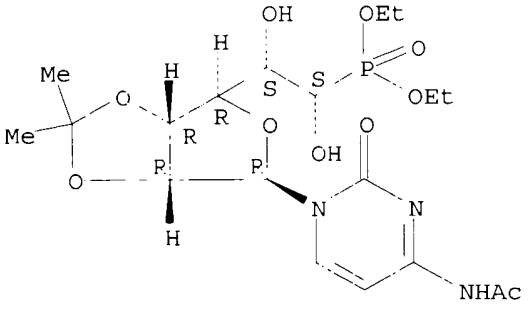
This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

```
=> s l4
L5          18 L4

=> s l5 and polyethylene glycol
        269659 POLYETHYLENE
        274821 GLYCOL
         72824 POLYETHYLENE GLYCOL
                 (POLYETHYLENE(W)GLYCOL)
L6           0 L5 AND POLYETHYLENE GLYCOL

=> s l5 and polymer?
       1437778 POLYMER?
L7           0 L5 AND POLYMER?

=> d l5 bib abs hitstr 1-18

L5   ANSWER 1 OF 18  CAPLUS  COPYRIGHT 2002 ACS
AN   2000:658697  CAPLUS
DN   134:17662
TI   Synthesis of phosphonate derivatives of uridine, cytidine, and cytosine
     arabinoside
AU   Jung, K.-Y.; Hohl, R. J.; Wiemer, A. J.; Wiemer, D. F.
CS   Department of Chemistry, University of Iowa, Iowa City, IA, 52242-1294,
     USA
SO   Bioorganic & Medicinal Chemistry (2000), 8(10), 2501-2509
     CODEN: BMECEP; ISSN: 0968-0896
PB   Elsevier Science Ltd.
DT   Journal
LA   English
OS   CASREACT 134:17662
AB   The vinyl phosphonate derivs. of uridine, cytidine, and cytosine
     arabinoside (ara-C) have been prepd. through oxidn. of appropriately
     protected nucleosides to the 5'-aldehydes and Wittig condensation with
     [(diethoxyphosphinyl)methylidine]triphenylphosphorane.  Dihydroxylation of
     these vinyl phosphonates with an AD-mix reagent generated the new
     5',6'-dihydroxy-6'-phosphonates.  After hydrolysis of the phosphonate
     esters and the various protecting groups, the six phosphonic acids were
     tested for their ability to serve as substrates for the enzyme nucleotide
     monophosphate kinase and for their toxicity to K562 cells.
IT   310409-23-5P 310409-27-9P 310409-29-1P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (synthesis of phosphonate derivs. of uridine cytidine and cytosine
        arabinoside as substrate for nucleotide monophosphate kinase)
```

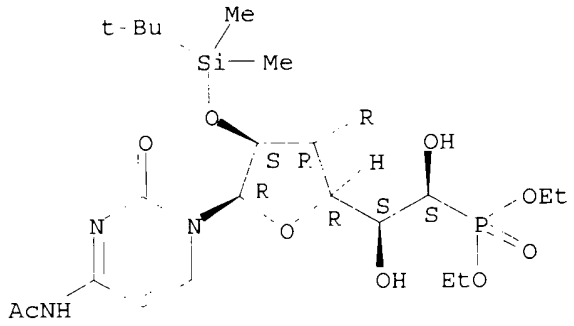
RN 310409-23-5 CAPLUS
CN Acetamide, N-[1-[(6S)-6-C-(diethoxyphosphinyl)-2,3-O-(1-methylethylidene)-.beta.-D-allofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

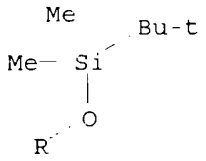
Absolute stereochemistry.



RN 310409-27-9 CAPLUS
CN Acetamide, N-[1-[(6S)-6-C-(diethoxyphosphinyl)-2,3-bis-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-D-altrofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

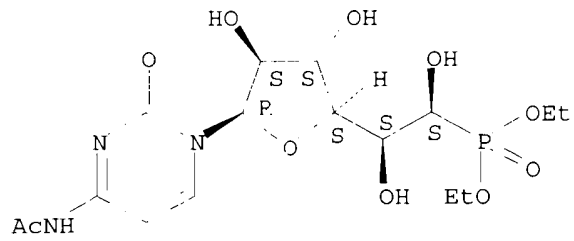
Absolute stereochemistry.

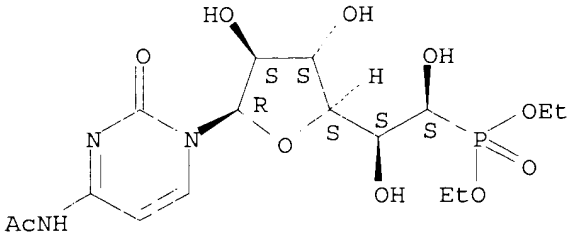




RN 310409-29-1 CAPLUS
CN Acetamide, N-[1-[(6S)-6-C-(diethoxyphosphinyl)-.beta.-D-altrofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

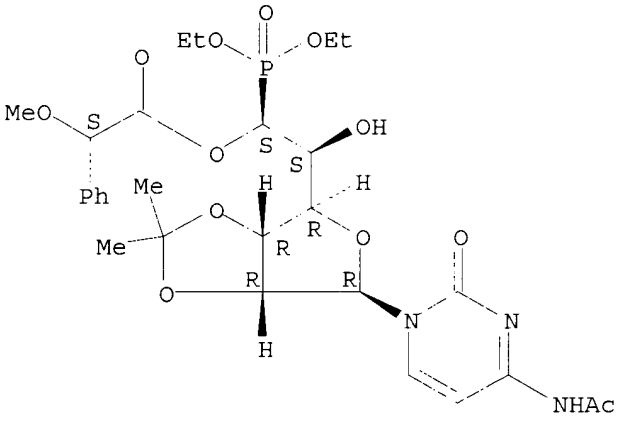




IT **310409-33-7P 310409-35-9P 310409-37-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of phosphonate derivs. of uridine cytidine and cytosine arabinoside as substrate for nucleotide monophosphate kinase)

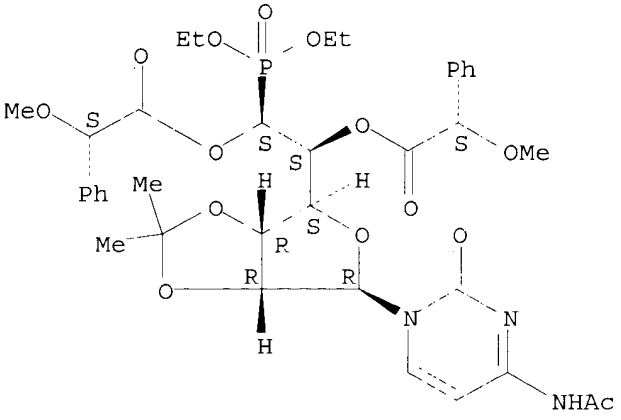
RN 310409-33-7 CAPLUS
CN Acetamide, N-[1-[(6S)-6-C-(diethoxyphosphinyl)-6-O-[(2S)-methoxyphenylacetyl]-2,3-O-(1-methylethylidene)-.beta.-D-allofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 310409-35-9 CAPLUS
CN Acetamide, N-[1-[(6S)-6-C-(diethoxyphosphinyl)-5,6-bis-O-[(2S)-methoxyphenylacetyl]-2,3-O-(1-methylethylidene)-.beta.-D-allofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

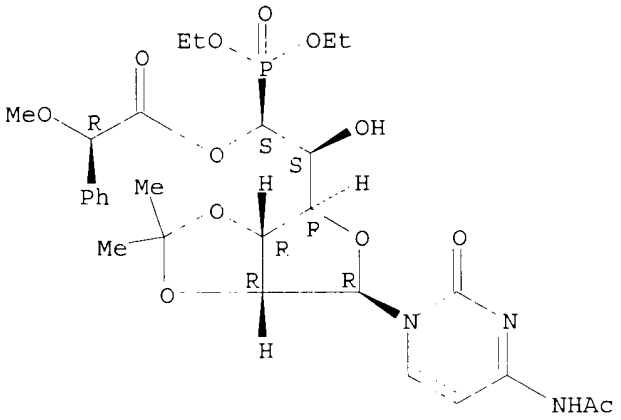
Absolute stereochemistry.



RN 310409-37-1 CAPLUS

CN Acetamide, N-[1-[(6S)-6-C-(diethoxyphosphinyl)-6-O-[(2R)-methoxyphenylacetyl]-2,3-O-(1-methylethylidene)-.beta.-D-allofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

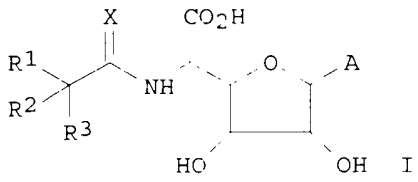


RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2002 ACS
AN 1999:747448 CAPLUS
DN 131:346494
TI Allofuranosyluronic acids, and fungicides and chitin synthase inhibitors containing them
IN Kiyoto, Taro; Miyao, Noriko
PA Toyama Chemical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11322778	A2	19991124	JP 1999-72868	19990318
PRAI JP 1998-90855		19980319		

OS MARPAT 131:346494
GI



AB Title compds. I [R1, R2 = H, (substituted) alkyl, aralkyl, aryl, cycloalkyl, acyl, heterocyclyl; R3 = (protected) amino; X = O, S; A = pyrimidinone group] or their salts are prepd. as fungicides and chitin synthase inhibitors. 5-Amino-1-[5-N-carboxymethylcarbamoyl-2,4-(1H,3H)-pyrimidinedion-1-yl]-1,5-dideoxy-.beta.-D-allofuranosyluronic acid (0.10 g, prepn. given) was amidated with 4-nitrophenyl N-(tert-butoxycarbonyl)-2-aminododecanoate in the presence of 1-hydroxybenzotriazole and N-methylmorpholine in aq. DMF at room temp. for 2 h and treated with aq. CF3CO2H to give 0.5 g .beta.-D-I [R1 = decyl, R2 = H, R3 = NH2, X = O, A =

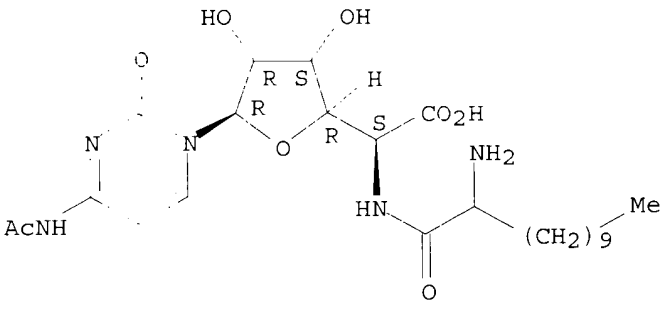
5-N-carboxymethylcarbamoyl-2,4-(1H,3H)-pyrimidinedion-1-yl] trifluoroacetate diastereomer mixt., which in vitro showed inhibition of chitin synthase of Candida Albicans TIMM 1623 with IC50 of 0.02 .mu.g/mL.

IT **250285-78-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of allofuranosyluronic acids as fungicides and chitin synthase inhibitors)

RN 250285-78-0 CAPLUS

CN .beta.-D-Allofuranuronic acid, 1-[4-(acetylamino)-2-oxo-1(2H)-pyrimidinyl]-5-[(2-amino-1-oxododecyl)amino]-1,5-dideoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

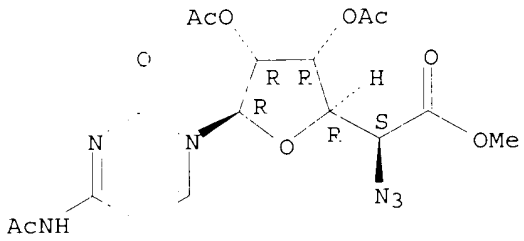


IT **250285-60-0P**
RL: PCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Peactant or reagent)
(prepn. of allofuranosyluronic acids as fungicides and chitin synthase inhibitors)

RN 250285-60-0 CAPLUS

CN .beta.-D-Allofuranuronic acid, 1-[4-(acetylamino)-2-oxo-1(2H)-pyrimidinyl]-5-azido-1,5-dideoxy-, methyl ester, 2,3-diacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2002 ACS

AN 1999:573615 CAPLUS

DN 131:351593

TI Preparation of nucleoside 5'-deoxy-5'-methylenephosphonates as building blocks for the synthesis of methylenephosphonate analogues

AU Kers, Annika; Szabo, Tomas; Stawinski, Jacek

CS Arrhenius Laboratory, Department of Organic Chemistry, Stockholm University, Stockholm, S-106 91, Swed.

SO Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1999), (18), 2585-2590
CODEN: JCPRB4; ISSN: 0300-922X

PB Royal Society of Chemistry

DT Journal

LA English

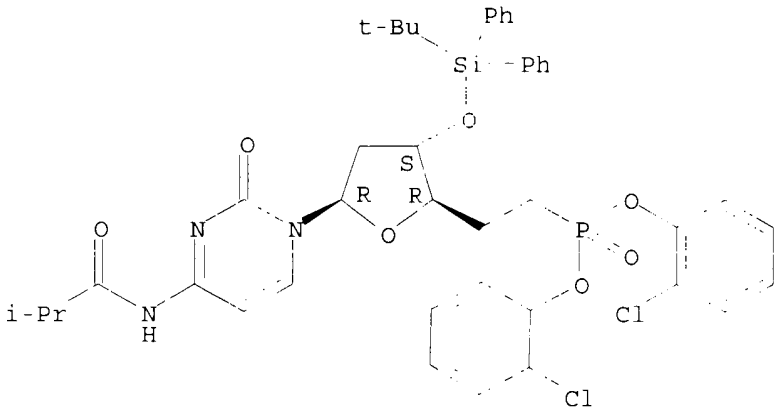
AB Efficient synthesis of suitably protected 2'-deoxycytidine, 2'-deoxyadenosine, 2'-deoxyguanosine derivs. bearing the 5'-methylenephosphonate moiety with the 4-methoxy-1-oxido-2-picolyl function as an intramol. nucleophile catalytic group is described.

IT **250649-33-3P 250649-51-5P 250649-66-2P**
250649-79-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of nucleoside deoxymethylenephosphonates as building blocks for the synthesis of methylenephosphonate analogs)

RN 250649-33-3 CAPLUS

CN Propanamide, N-[1-[6-[bis(2-chlorophenoxy)phosphinyl]-2,5,6-trideoxy-3-O-[(1,1-dimethylethyl)diphenylsilyl]-.beta.-D-erythro-hexofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



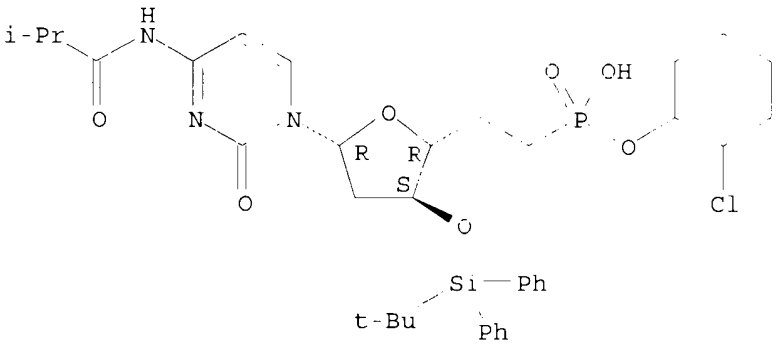
RN 250649-51-5 CAPLUS

CN Propanamide, N-[1-[6-[(2-chlorophenoxy)hydroxyphosphinyl]-2,5,6-trideoxy-3-O-[(1,1-dimethylethyl)diphenylsilyl]-.beta.-D-erythro-hexofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]-2-methyl-, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

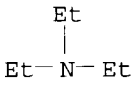
CRN 250649-50-4
CMF C36 H43 Cl N3 O7 P Si

Absolute stereochemistry.



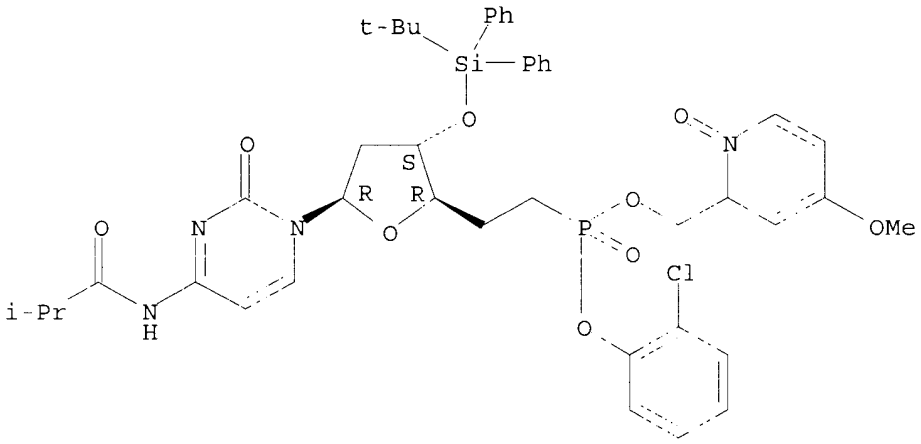
CM 2

CRN 121-44-8
CMF C6 H15 N



RN 250649-66-2 CAPLUS
CN Propanamide, N-[1-[6-[(2-chlorophenoxy)[(4-methoxy-1-oxido-2-pyridinyl)methoxy]phosphinyl]-2,5,6-trideoxy-3-O-[(1,1-dimethylethyl)diphenylsilyl]-.beta.-D-erythro-hexofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

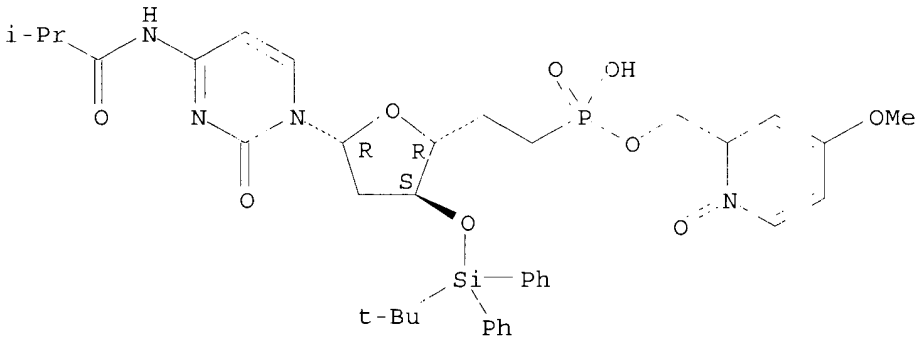


RN 250649-79-7 CAPLUS
CN Propanamide, N-[1,2-dihydro-2-oxo-1-[2,5,6-trideoxy-3-O-[(1,1-dimethylethyl)diphenylsilyl]-6-[hydroxy[(4-methoxy-1-oxido-2-pyridinyl)methoxy]phosphinyl]-.beta.-D erythro-hexofuranosyl]-4-pyrimidinyl]-2-methyl-, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

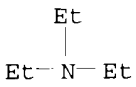
CRN 250649-78-6
CMF C37 H47 N4 O9 P Si

Absolute stereochemistry.



CM 2

CRN 121-44-8
CMF C6 H15 N

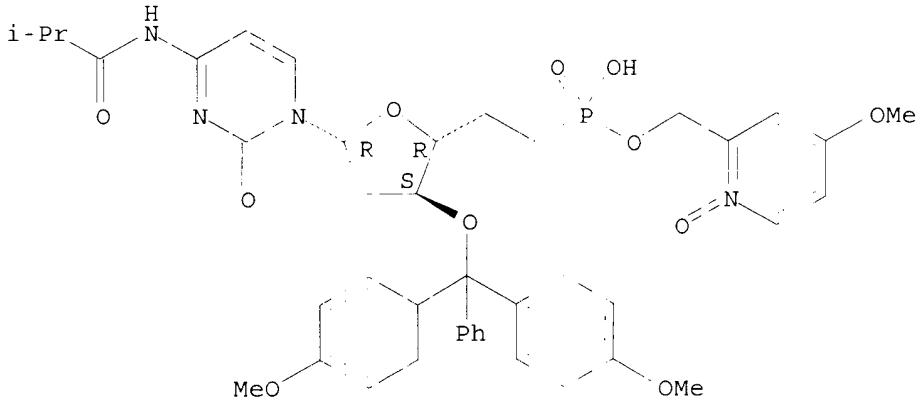


IT **250649-84-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of nucleoside deoxymethylenephosphonates as building blocks for the synthesis of methylenephosphonate analogs)
RN 250649-84-4 CAPLUS
CN Propanamide, N-[1-[3-O-[bis(4-methoxyphenyl)phenylmethyl]-2,5,6-trideoxy-6-[hydroxy[(4-methoxy-1-oxido-2-pyridinyl)methoxy]phosphinyl]-.beta.-D-erythro-hexofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]-2-methyl-, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

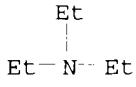
CRN 250649-83-3
CMF C42 H47 N4 O11 P

Absolute stereochemistry.



CM 2

CRN 121-44-8
CMF C6 H15 N



RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2002 ACS
AN 1998:678162 CAPLUS
DN 130:66720

TI Synthesis and pairing properties of oligoribonucleotide analogs containing a metal-binding site attached to .beta.-D-allofuranosyl cytosine

AU Wu, Xiaolin; Pitsch, Stefan
CS Universitatstrasse 16, Organisch-Chemisches Laboratorium der Eidgenossischen Technischen Hochschule, Zurich, CH-8092, Switz.

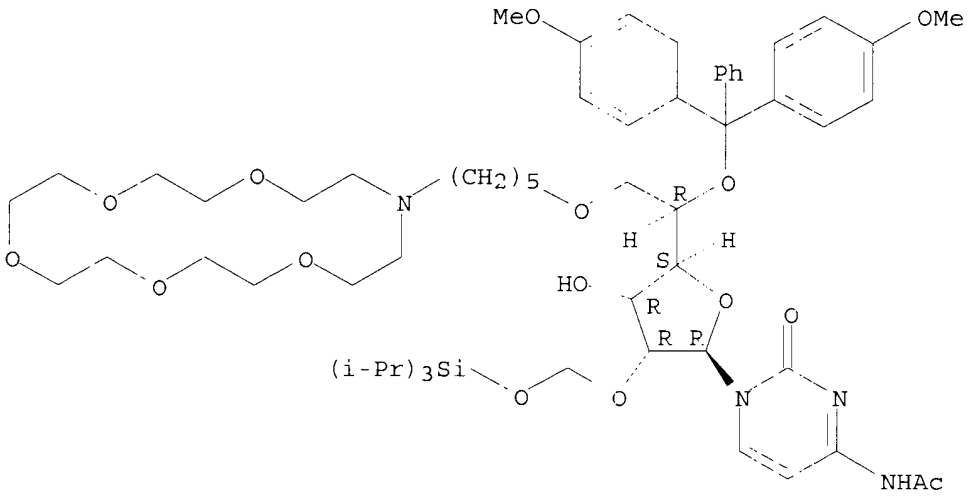
SO Nucleic Acids Res. (1998), 26(19), 4315-4323
CODEN: NARHAD; ISSN: 0305-1048
PB Oxford University Press
DT Journal
LA English

AB A method for the facile prepn. of oligoribonucleotide analogs contg. .beta.-D-allo-furanosyl nucleosides with addnl. functional groups tethered to the 6'-O positions is presented. It is based on the synthesis in two protected nucleosides carrying a 6'-O-bromopentyl and a 6'-O-methylaminopentyl substituent. By a simple two-step procedure, these key intermediates were transformed into two phosphoramidites carrying a 1-aza-18-crown-6 and a triethyleneglycol group, resp., each capable of complexing metal ions. By automated synthesis, these functionalized nucleoside analogs were efficiently incorporated into short oligoribonucleotides. Under physiol. conditions (150 mM NaCl, 2 mM MgCl2, pH 7.4), incorporation of a single allo-furanosyl cytosine substituted with a triethyleneglycol moiety led to a significant enthalpic stabilization of an A-type RNA duplex. This observation is in agreement with a metal ion-mediated stabilizing interaction between the two pairing strands.

IT **217300-20-4P 217300-21-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and pairing properties of oligoribonucleotide analogs contg. a metal-binding site attached to .beta.-D-allo-furanosyl cytosine)

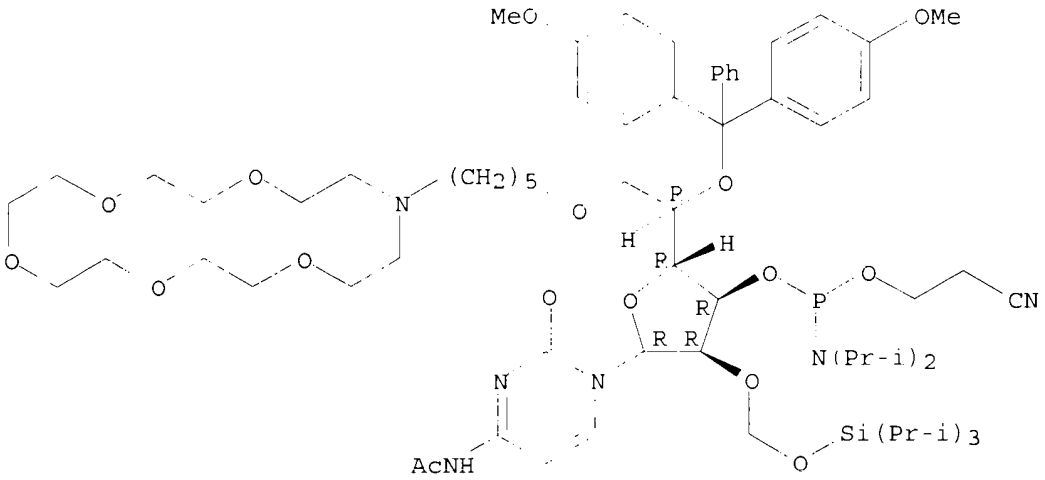
RN 217300-20-4 CAPLUS
CN Acetamide, N-[1-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-6-O-[5-(1,4,7,10,13-pentaoxa-16-azacyclooctadec-16-yl)pentyl]-2-O-[[[tris(1-methylethyl)silyl]oxy]methyl]-.beta.-D-allofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



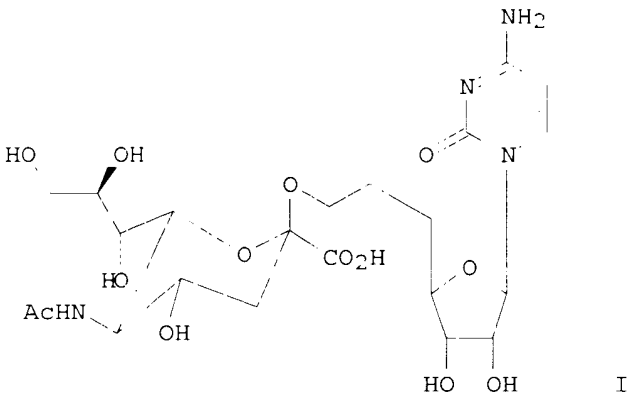
RN 217300-21-5 CAPLUS
CN Acetamide, N-[1-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[[bis(1-methylethyl)amino](2-cyanoethoxy)phosphino]-6-O-[5-(1,4,7,10,13-pentaoxa-16-azacyclooctadec-16-yl)pentyl]-2-O-[[[tris(1-methylethyl)silyl]oxy]methyl]-.beta.-D-allofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2002 ACS
AN 1996:216181 CAPLUS
DN 125:11334
TI Synthesis of a carbon-linked CMP NANA analog and its inhibitory effects on GM3 and GD3 synthases
AU Hatanaka, Yasumaru; Hashimoto, Makoto; Hidari, Kazuya I.-P. Jwa; Sanai, Yutaka; Nagai, Yoshitaka; Kanaoka, Yuichi
CS Res. Inst. for Wakan-Yaku, Toyama Medical and Pharmaceutical Univ., Toyama, 930-01, Japan
SO Heterocycles (1996), 43(3), 531-4
CODEN: HTCYAM; ISSN: 0385-5414
DT Journal
LA English
GI



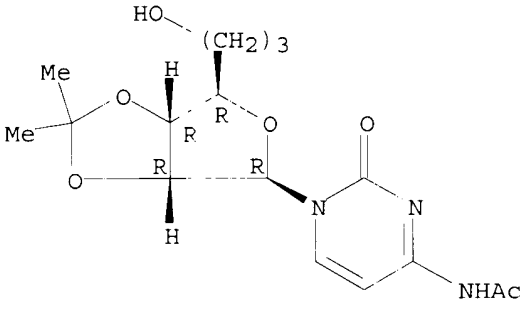
I

AB A carbon-linked analog I of cytidine monophospho-N-acetylneuraminic acid (CMP-NANA) was synthesized as the degrdn. resistant inhibitor for sialyltransferases. The compd. is the first example of synthetic CMP-NANA analog that exhibited inhibitory effected on the activity of GM3 and GD3 synthases.

IT **146759-56-0P 146759-57-1P 146787-21-5P**
176967-24-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(synthesis of carbon-linked analog of cytidine monophospho-N-acetylneuraminic acid as sialyltransferase inhibitors)

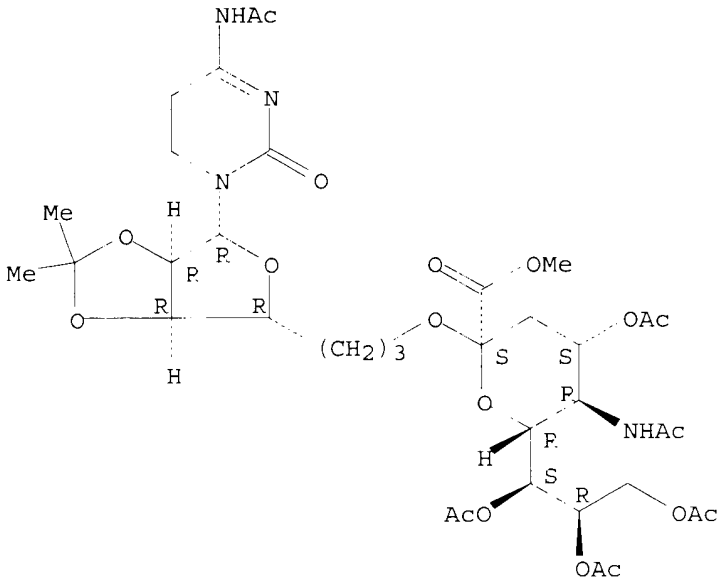
RN 146759-56-0 CAPLUS
CN Acetamide, N-[1-[5,6-dideoxy-2,3-O-(1-methylethylidene)-.beta.-D-ribo-heptofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



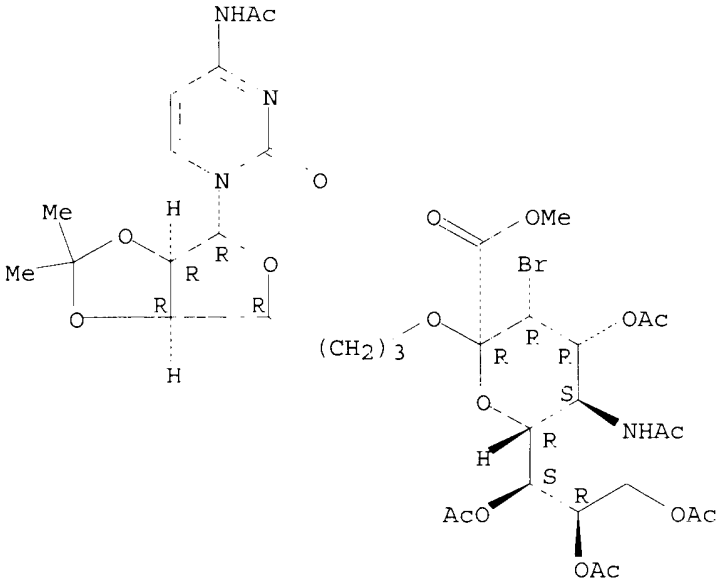
RN 146759-57-1 CAPLUS
CN Acetamide, N-[1-[7-O-(N-acetyl-4,7,8,9-tetra-O-acetyl-1-methyl-.beta.-neuraminosyl)-5,6-dideoxy-2,3-O-(1-methylethylidene)-.beta.-D-ribo-heptofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



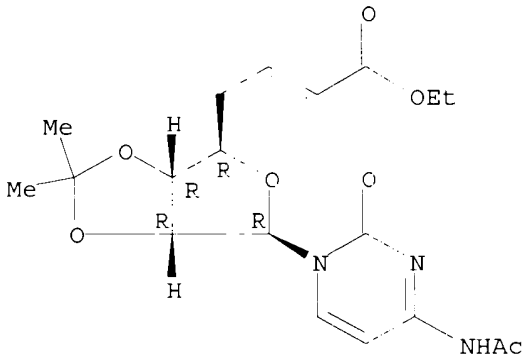
RN 146787-21-5 CAPLUS
CN Acetamide, N-[1-[5,6-dideoxy-2,3-O-(1-methylethylidene)-7-O-[4,7,8,9-tetra-O-acetyl-5-(acetylamino)-3-bromo-3,5-dideoxy-1-methyl-D-erythro-.alpha.-L-manno-2-nonulopyranosonosyl]-.beta.-D-ribo-heptofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 176967-24-1 CAPLUS
CN .beta.-D-ribo-Oct-6-enofuranuronic acid, 1-[4-(acetylamino)-2-oxo-1(2H)-pyrimidinyl]-1,5,6,7-tetradeoxy-2,3-O-(1-methylethylidene)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



L5 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2002 ACS
AN 1995:777638 CAPLUS
DN 123:228784
TI Preparation of dinucleotide and oligonucleotide analogs useful as drugs and diagnostics.
IN Baxter, Anthony David; Baylis, Eric Keith; Collingwood, Stephen Paul; Taylor, Roger John; De Mesmaeker, Alain; Schmit, Chantal
PA Ciba-Geigy A.-G., Switz.
SO Eur. Pat. Appl., 73 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

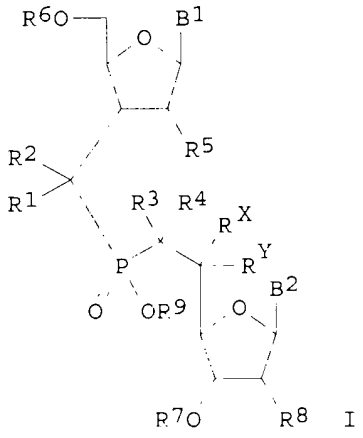
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 614907	A1	19940914	EP 1994-301443	19940301

R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, LU, NL, PT, SE

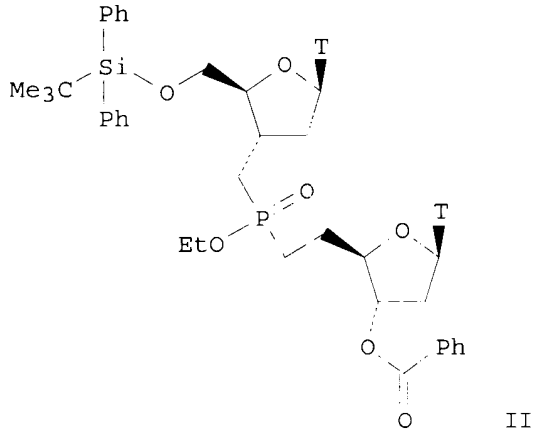
	US 5466677	A	19951114	US 1994-204020	19940228
	ZA 9401527	A	19940906	ZA 1994-1527	19940304
	CA 2117009	AA	19940907	CA 1994-2117009	19940304
	AU 9457590	A1	19940908	AU 1994-57590	19940304
	AU 675104	B2	19970123		
	JP 08003185	A2	19960109	JP 1994-58381	19940304
	US 5670489	A	19970923	US 1995-463139	19950602
PRAI	GB 1993-4618		19930306		
	US 1994-204020		19940228		

OS MARPAT 123:228784

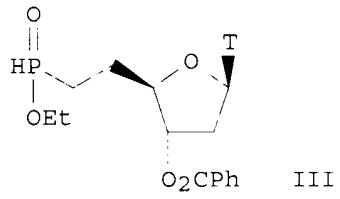
GI



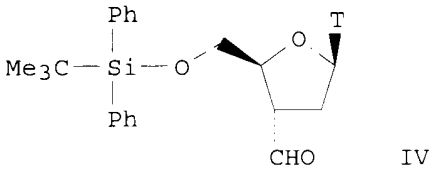
I



II



III



IV

AB Title compds. [I; B1, B2 = nucleoside base; R1 = R1a, Z; R1a, R2, R3, R4 = H, halo, OH; R5 = R5a, Z; R6 = H, R6a; R7 = H, alkyl-N,N-dialkylphosphoramidyl, R7a; R8 = R8a, Z; R8R7O = isopropylidenedioxy; R5a, R8a = H, halo, OH, OR10, OCOR10, trihydrocarbylsilyloxy; R6a, R7a = aliphatyl, aryl, araliphatyl, COR11, SO2R11,trihydrocarbylsilyl; R9 = H, aliphatyl, cycloaliphatyl, aryl, araliphatyl, alkali metal, ammonium; R10, R11 = aliphatyl, cycloaliphatyl, aryl, araliphatyl; Rx, Ry = H, halo, OH, alkyl, alkenyl, cycloalkyl, aryl, aralkyl, alkoxy, alkenyloxy, aryloxy, (substituted) aralkoxy, OCORz; Rz = (substituted) alkyl, alkenyl, cycloalkyl, aryl, aralkyl; Z = (substituted) aryloxythiocarbonyloxy], and oligonucleotides contg. I, were prepd. Thus, title compd. (II; T = 1-thyminyl), prepd. via coupling of phosphinate III with aldehyde IV in THF in the presence of DBU, inhibited human cytomegalovirus with IC50 <10 .mu.M. Oligonucleotides contg. I were prepd. and hybridized with their complimentary RNA sequences; they are resistant to nucleases and are suitable for antisense technol.

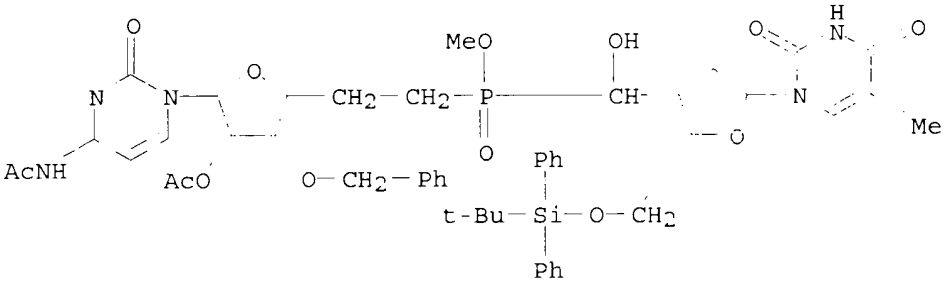
IT **167399-05-5P 167610-83-5P 167610-84-6P 167816-96-8P**

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of dinucleotide and oligonucleotide analogs useful as drugs and diagnostics)

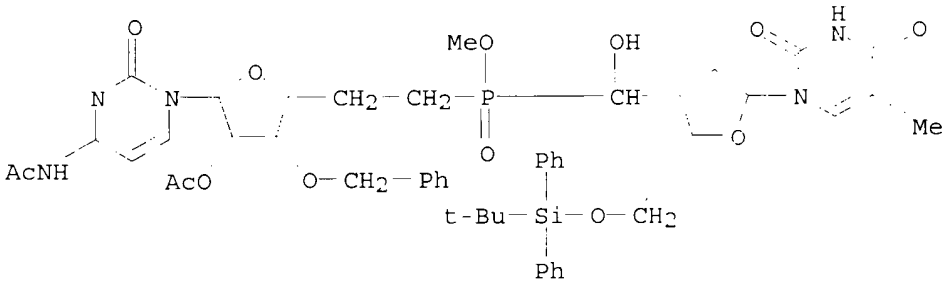
RN 167399-05-5 CAPLUS

CN Cytidine, 3'-de(phosphinicooxy)-5'-O-[(1,1-dimethylethyl)diphenylsilyl]thymidylyl[(R)-hydroxymethylene][(R)-methoxyphosphinylidene]methylene-(3'.fwdarw.5')-5'-deoxy-N-acetyl-3'-O-(phenylmethyl)-, 2'-acetate (9CI) (CA INDEX NAME)



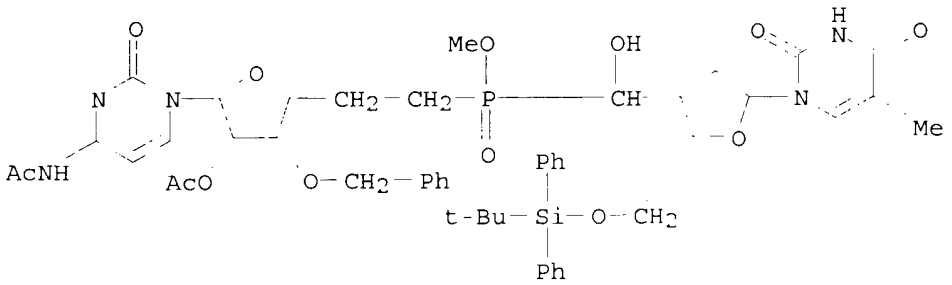
RN 167610-83-5 CAPLUS

CN Cytidine, 3'-de(phosphinicooxy)-5'-O-[(1,1-dimethylethyl)diphenylsilyl]thymidylyl[(P)-hydroxymethylene][(S)-methoxyphosphinylidene]methylene-(3'.fwdarw.5')-N-acetyl-5'-deoxy-3'-O-(phenylmethyl)-, 2'-acetate (9CI) (CA INDEX NAME)



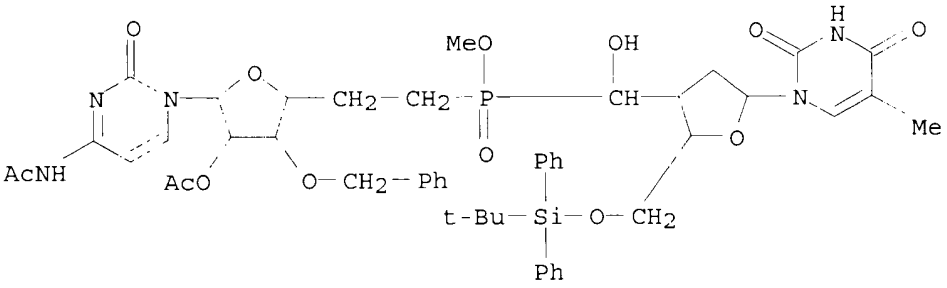
RN 167610-84-6 CAPLUS

CN Cytidine, 3'-de(phosphinicooxy)-5'-O-[(1,1-dimethylethyl)diphenylsilyl]thymidylyl[(S)-hydroxymethylene][(R)-methoxyphosphinylidene]methylene-(3'.fwdarw.5')-N-acetyl-5'-deoxy-3'-O-(phenylmethyl)-, 2'-acetate (9CI) (CA INDEX NAME)



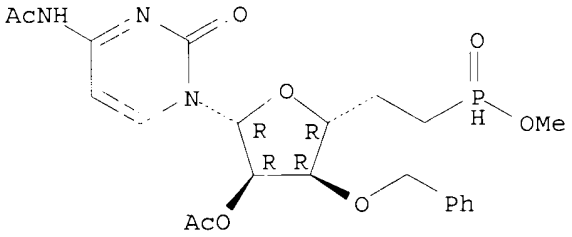
RN 167816-96-8 CAPLUS

CN Cytidine, 3'-de(phosphinicooxy)-5'-O-[(1,1-dimethylethyl)diphenylsilyl]thymidylyl[(S)-hydroxymethylene][(S)-methoxyphosphinylidene]methylene-(3'.fwdarw.5')-N-acetyl-5'-deoxy-3'-O-(phenylmethyl)-, 2'-acetate (9CI) (CA INDEX NAME)



IT **162880-99-1P**
RL: PCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of dinucleotide and oligonucleotide analogs useful as drugs and diagnostics)
RN 162880-99-1 CAPLUS
CN Acetamide, N-[1-[2-O-acetyl-5,6-dideoxy-6-(methoxyphosphinyl)-3-O-(phenylmethyl)-.beta.-D-ribo-hexofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2002 ACS
AN 1995:631109 CAPLUS
DN 124:290105
TI Synthesis of 5'-C-methyl-D-allo- and L-talo-ribonucleoside 3'-O-phosphoramidites and their incorporation into hammerhead ribozymes
AU Beigelman, Leonid; Karpeisky, Alexander; Usman, Nassim
CS Dep. of Chemistry and Biochemistry, Ribozyme Pharmaceuticals Inc., Boulder, CO, 80301, USA
SO Nucleosides Nucleotides (1995), 14(3-5), 901-5
CODEN: NUNUD5; ISSN: 0732-8311
DT Journal
LA English
OS CASREACT 124:290105
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

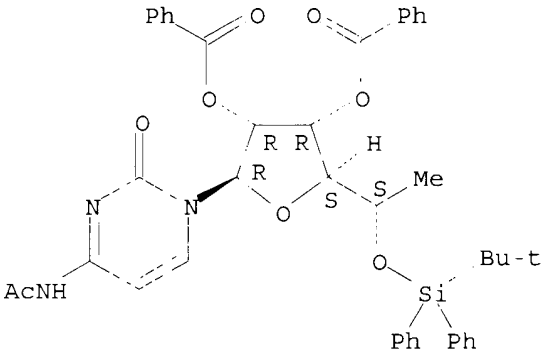
AB 5'-C-methyl-D-allo and L-talo-ribonucleoside 3'-O-phosphoramidites were prepd. from L-rhamnose in 13 and 15 steps resp. via the glycosylation synthons I and II. Incorporation of L-talo residues in the hammerhead ribozyme and the resulting catalytic activity and nuclease stability of the modified ribozymes is described.
IT **170024-45-0P 170024-49-4P 170024-53-0P**
170024-58-5P 170024-62-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(synthesis of C-methylribonucleoside phosphoramidites and their incorporation into hammerhead ribozymes)

RN 170024-45-0 CAPLUS

CN Acetamide, N-[1-[2,3-di-O-benzoyl-6-deoxy-5-O-[(1,1-dimethylethyl)diphenylsilyl]-.alpha.-L-talofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

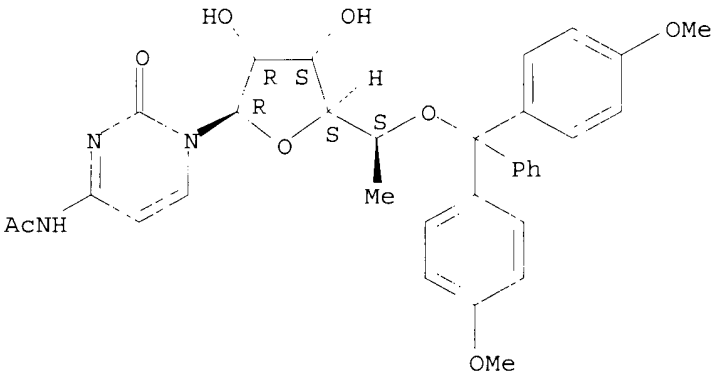
Absolute stereochemistry.



RN 170024-49-4 CAPLUS

CN Acetamide, N-[1-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-6-deoxy-.alpha.-L-talofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

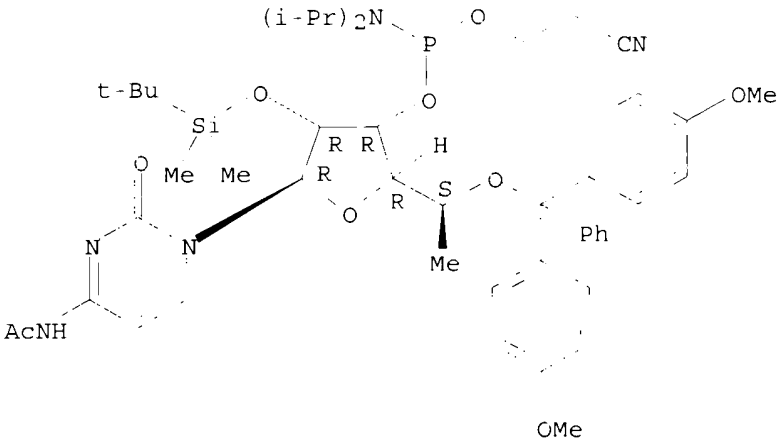
Absolute stereochemistry.



RN 170024-53-0 CAPLUS

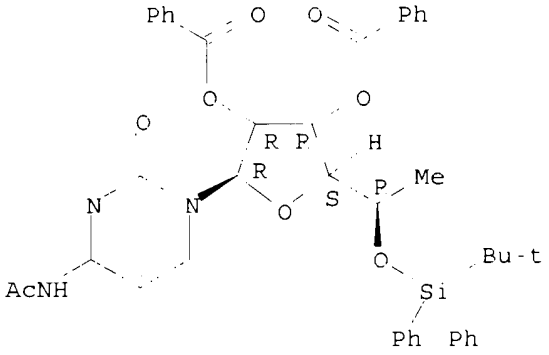
CN Acetamide, N-[1-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[[bis(1-methylethyl)amino](2-cyanoethoxy)phosphino]-6-deoxy-2-O-[(1,1-dimethylethyl)dimethylsilyl]-.alpha.-L-talofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



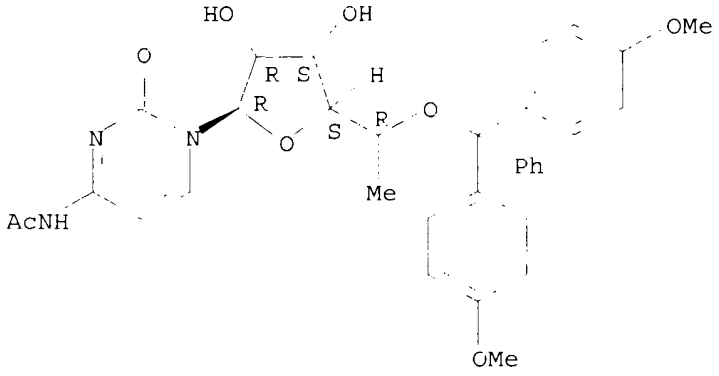
RN 170024-58-5 CAPLUS
CN Acetamide, N-[1-[2,3-di-O-benzoyl-6-deoxy-5-O-[(1,1-dimethylethyl)diphenylsilyl]-.beta.-D-allofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 170024-62-1 CAPLUS
CN Acetamide, N-[1-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-6-deoxy-.beta.-D-allofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



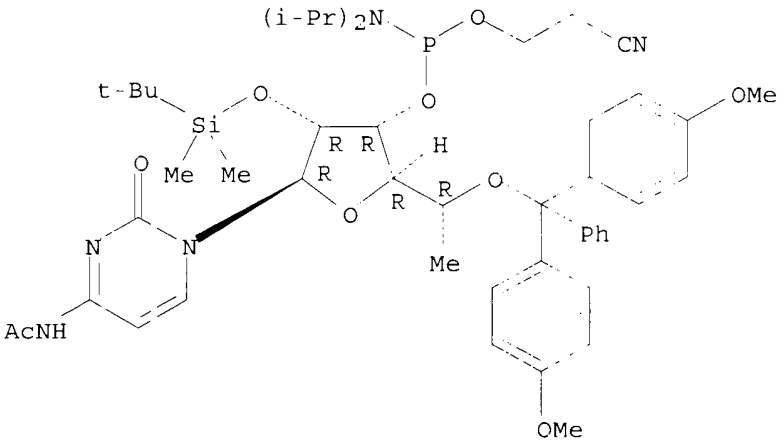
IT **170024-66-5P**
RL: SPN (Synthetic preparation); PPEP (Preparation)

(synthesis of C-methylribonucleoside phosphoramidites and their incorporation into hammerhead ribozymes)

RN 170024-66-5 CAPLUS

CN Acetamide, N-[1-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[[bis(1-methylethyl)amino](2-cyanoethoxy)phosphino]-6-deoxy-2-O-[(1,1-dimethylethyl)dimethylsilyl]-.beta.-D-allofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2002 ACS

AN 1995:538237 CAPLUS

DN 122:291449

TI Preparation of mononucleotide analogs.

IN Baxter, Anthony David; Baylis, Eric Keith; Collingwood, Stephen Paul; Taylor, Roger John; De Mesmaeker, Alain; Schmit, Chantal

PA Ciba-Geigy A.-G., Switz.

SO Eur. Pat. Appl., 58 pp.
CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 614906	A1	19940914	EP 1994-301441	19940301
	R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, LU, NL, PT, SE				
	US 5508270	A	19960416	US 1994-203962	19940228
	CA 2117014	AA	19940907	CA 1994-2117014	19940304
	AU 9457598	A1	19940908	AU 1994-57598	19940304
	AU 676529	B2	19970313		
	ZA 9401528	A	19940919	ZA 1994-1528	19940304
	JP 07309885	A2	19951128	JP 1994-58326	19940304
PRAI	GB 1993-4620		19930306		

OS CASREACT 122:291449; MARPAT 122:291449

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. [I; R1 = H, protecting group; R2 = H, C1-8 aliphatyl, C6-15 aryl, C3-8 cycloaliphatyl, C7-13 araliphatyl, alkali metal ion, ammonium ion; R3, R4 = H, halo, OH; R5 = (substituted) C6-10 aryloxythiocarbonyloxy, R5a; R5a = H, F, Cl, OH, OR8, O2CR8,

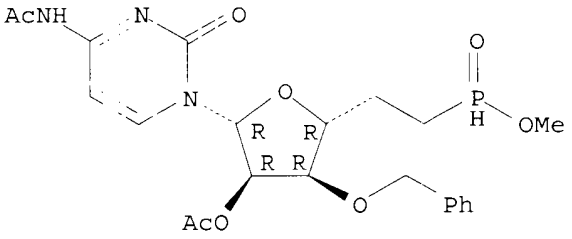
trihydrocarbylsilyloxy; R6 = H, C1-10 aliphatyl, C6-15 aryl, C7-16 araliphatyl, COR9, SO2R9, trihydrocarbylsilyl; R7 = monovalent nucleoside base, OH, OR8 or O2CR8; R8, R9 = C1-10 aliphatyl, C3-8 cycloaliphatyl, C6-15 aryl, C7-16 araliphatyl; R5R6O or R5R7 = isopropylidenedioxy; provided that when R5R7 = isopropylidenedioxy, R1 R2, R3, R4, and R6 are not all H], were prepd. as intermediates for oligonucleotide analogs useful in antisense probes and as potential virucides (no data). Thus, MeC(OEt)2P(O)(OEt)Me in THF at -78.degree. was treated sequentially with BuLi, BF3.Et2O, and 1-(3,5-anhydro-.beta.-D-threo-pentofuranosyl)thymine in THF followed by stirring at -78.degree. to give compd. (II). II was stirred with di-Et azodicarboxylate, Ph3P, and PhCO2H in PhMe/THF to give compd. (III). III in EtOH/CHCl3 was treated with Me3SiCl overnight to give title compd. (IV).

IT **162880-99-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of mononucleotide analogs)

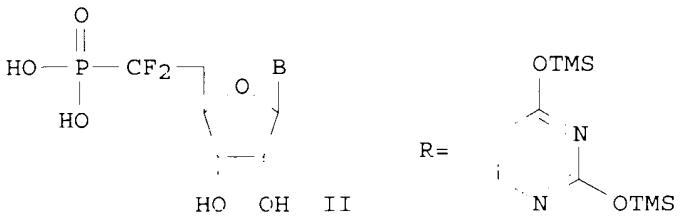
RN 162880-99-1 CAPLUS

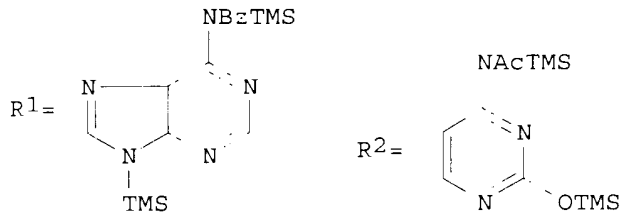
CN Acetamide, N-[1-[2-O-acetyl-5,6-dideoxy-6-(methoxyphosphinyl)-3-O-(phenylmethyl)-.beta.-D-ribo-hexofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2002 ACS
AN 1995:495096 CAPLUS
DN 122:291431
TI Synthesis of 5'-Deoxy-5'-Difluoromethyl Phosphonate Nucleotide Analogs
AU Matulic-Adamic, Jasenka; Haeberli, Peter; Usman, Nassim
CS Department of Chemistry Biochemistry, Ribozyme Pharmaceuticals Inc., Boulder, CO, 80301, USA
SO J. Org. Chem. (1995), 60(8), 2563-9
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
GI





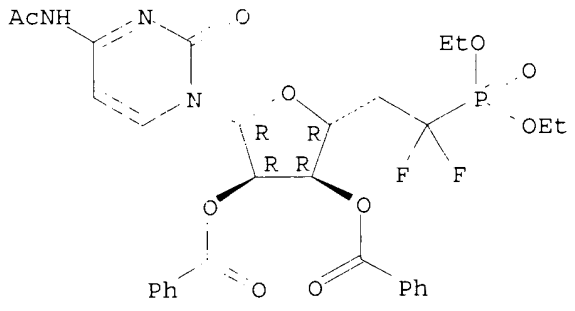
AB A synthetic route to nucleoside 5'-deoxy-5'-difluoromethyl phosphonates from ribofuranosyl 5-deoxy-5-difluoromethyl phosphonate precursors is described. Me 5,6-dideoxy-6-(diethoxyphosphinyl)-6,6-difluoro-2,3-O-isopropylidene-.beta.-D-ribo-hexofuranoside was converted, under mild conditions, to the suitable glycosylating agent 1-O-acetyl-2,3-di-O-benzoyl-5,6-dideoxy-6-(diethoxyphosphinyl)-6,6-difluoro-.beta.-D-ribo-hexofuranoside (I). 1,2-Di-O-acetyl-3-O-benzyl-5,6-dideoxy-6-(diethoxyphosphinyl)-6,6-difluoro-.beta.-D-ribo-hexofuranoside was also prepd. as a versatile building block for nucleotide synthesis. Condensation of I with silylated nucleobases, followed by complete deprotection, afforded 5',6'-dideoxy-6'-(dihydroxyphosphinyl)-6',6'-difluoro nucleoside analogs II (B = R-R2).

IT **157224-77-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(synthesis of deoxydifluoromethyl phosphonate nucleotide analogs)

RN 157224-77-6 CAPLUS

CN Acetamide, N-[1-[2,3-di-O-benzoyl-5,6-dideoxy-6-(diethoxyphosphinyl)-6,6-difluoro-.beta.-D-ribo-hexofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2002 ACS

AN 1994:558070 CAPLUS

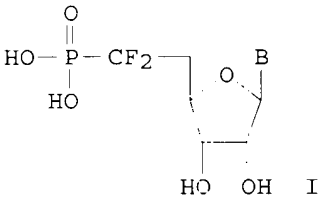
DN 121:158070

TI Synthesis of nucleoside 5'-deoxy-5'-difluoromethylphosphonates

AU Matulic-Adamic, Jasenka; Usman, Nassim

CS Dep. Chem. Biochem., Ribozyme Pharmaceuticals Inc., Boulder, CO, 80301, USA

SO Tetrahedron Lett. (1994), 35(20), 3227-30
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
GI



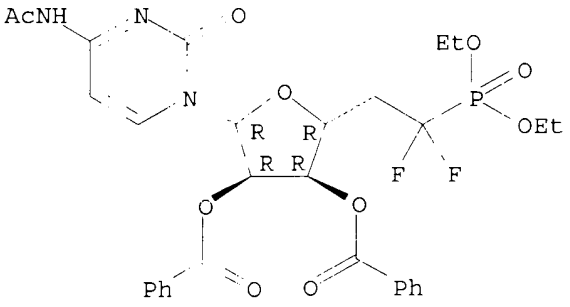
AB 1-O-Acetyl-2,3-di-O-benzoyl-D-ribofuranose 5-deoxy-5-difluoromethylphosphonate was synthesized in three steps from 1-O-methyl-2,3-O-isopropylidene-.beta.-D-ribofuranose 5-deoxy-5-difluoromethylphosphonate. Condensation of this suitably derivatized sugar with silylated pyrimidines and purines afforded novel nucleoside 5'-deoxy-5'-difluoromethylphosphonates I (B = adenine, cytosine, uracil).

IT **157224-77-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of, in prepn. of nucleotide deoxydifluoromethylphosphonates)

RN 157224-77-6 CAPLUS

CN Acetamide, N-[1-[2,3-di-O-benzoyl-5,6-dideoxy-6-(diethoxyphosphinyl)-6,6-difluoro-.beta.-D-ribo-hexofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]-(9CI) (CA INDEX NAME)

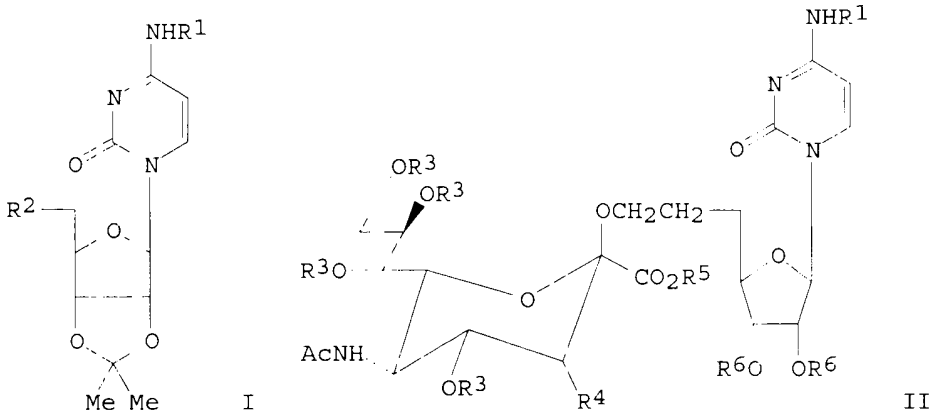
Absolute stereochemistry.



L5 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2002 ACS
AN 1993:449839 CAPLUS
DN 119:49839
TI Preparation of cytidine analogs and CMP-sialic acid analogs
IN Hatanaka, Yasumaru; Kaneoka, Yuichi
PA MECT Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04290894	A2	19921015	JP 1991-75891	19910315

OS MARPAT 119:49839
GI



I II

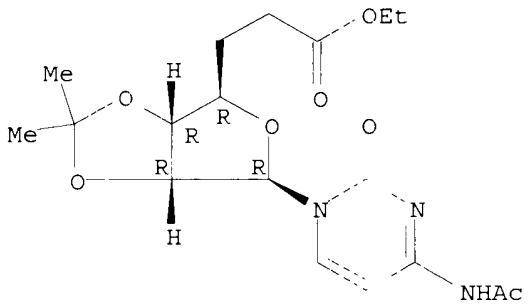
AB The title compds. I (R1 = H, Ac; R2 = EtO2CCH:CH, EtO2CCH2, HOCH2CH2) and II (R1, R3 = H, Ac; R4 = H, Br; R5 = H, Me; R6 = H or R6R6 may form CMe2) are prepd. II are useful in study of sialyl transferase. Treatment of II (R1 = R3 = Ac, R4 = H, R5 = Me, R6 = CMe2) (prepn. given) with aq. CF3CO2H-CH2Cl2 mixt. at room temp. for 3 h gave 42% II (R1 = R3 = Ac, R4 = R6 = H, R5 = Me), which (0.042 g) was further deprotected to afford 0.034 g II (R1 = R3 = R4 = R5 = R6 = H). The product inhibited 34% and 63% activity of sialyl transferase on lactosylceramide and ganglioside GM3, resp.

IT **146759-53-7P 146759-56-0P 146759-57-1P**
146759-58-2P 146787-21-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of)

RN 146759-53-7 CAPLUS

CN .beta.-D-ribo-Heptofuranuronic acid, 1-[4-(acetylamino)-2-oxo-1(2H)-pyrimidinyl]-1,5,6 trideoxy-2,3-O-(1-methylethylidene)-, ethyl ester (9CI) (CA INDEX NAME)

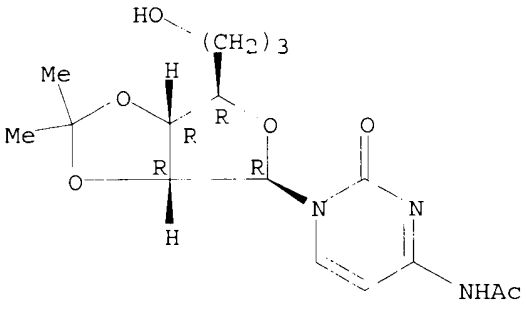
Absolute stereochemistry.



RN 146759-56-0 CAPLUS

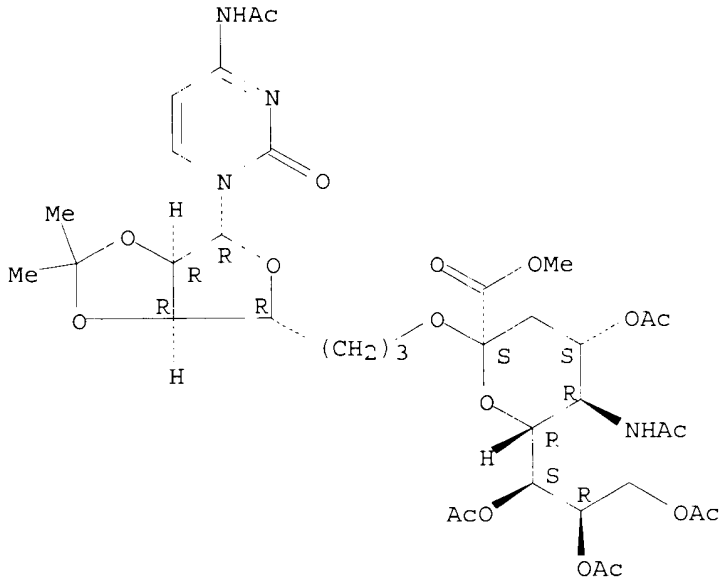
CN Acetamide, N-[1-[5,6-dideoxy-2,3-O-(1-methylethylidene)-.beta.-D-ribo-heptofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



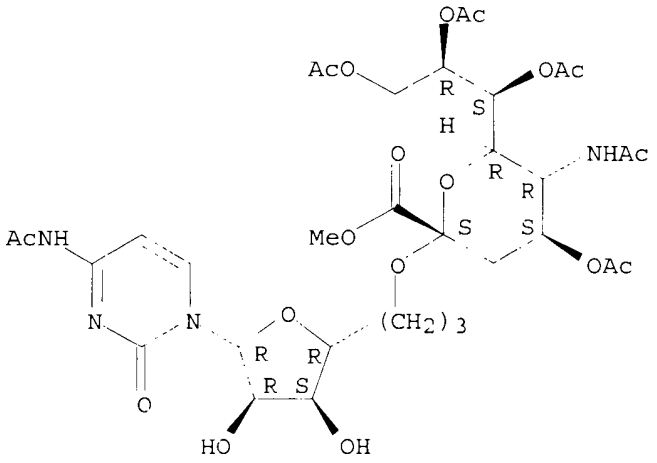
RN 146759-57-1 CAPLUS
CN Acetamide, N-[1-[7-O-(N-acetyl-4,7,8,9-tetra-O-acetyl-1-methyl-.beta.-neuraminosyl)-5,6-dideoxy-2,3-O-(1-methylethylidene)-.beta.-D-ribo-heptofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



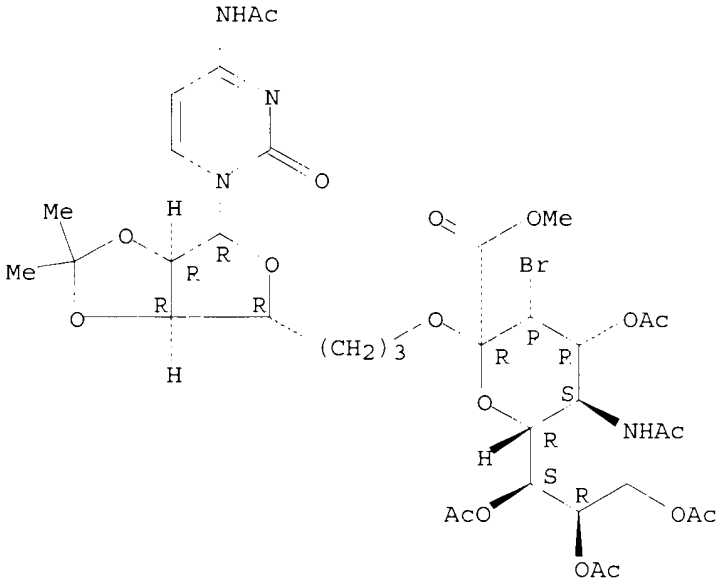
RN 146759-58-2 CAPLUS
CN Acetamide, N-[1-[7-O-(N-acetyl-4,7,8,9-tetra-O-acetyl-1-methyl-.beta.-neuraminosyl)-5,6-dideoxy-.beta.-D-ribo-heptofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 146787-21-5 CAPLUS
CN Acetamide, N-[1-[5,6-dideoxy 2,3-O-(1-methylethylidene)-7-O-[4,7,8,9-tetra-O-acetyl-5-(acetylamino)-3-bromo-3,5-dideoxy-1-methyl-D-erythro-.alpha.-L-manno-2-nonulopyranosonosyl]-.beta.-D-ribo-heptofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2002 ACS
AN 1992:152269 CAPLUS
DN 116:152269
TI Synthesis of 2',3'-dideoxy-D-erythro-hexofuranosyl nucleosides and 3'-azido-2',3'-dideoxy-D-arabino-hexofuranosyl nucleosides from tri-O-acetyl-D-glucal via an .alpha.,.beta.-unsaturated hexose aldehyde
AU Lau, Jesper; Wengel, Jesper; Pedersen, Erik B.; Vestergaard, Bent Faber
CS Dep. Chem., Odense Univ., Odense, DK-5230, Den.
SO Synthesis (1991), (12), 1183-90
CODEN: SYNTBF; ISSN: 0039-7881
DT Journal
LA English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

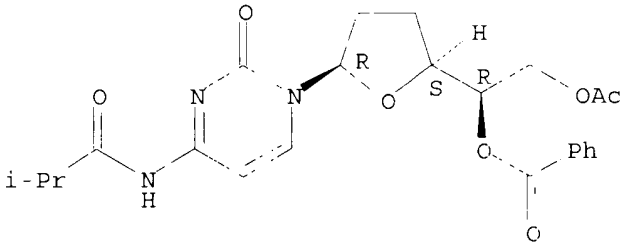
AB .alpha.,.beta.-Unsatd. aldehyde I prepd. from tri-O-acetyl-D-glycal was acetalated and benzoylated to give .alpha.,.beta.-unsatd. acetal II. Hydrogenation of the double followed by methanolysis resulted in Me 2,3-dideoxyfuranosyl glycoside III, which was used for nucleoside coupling with silylated N6-isobutyrylcytosine and silylated thymine. Protected 3-azido-2,3-dideoxy-arabino-furanose IV was prepd. by 1,4-addn. of hydrazoic acid to disilylated .alpha.,.beta.-unsatd. aldehyde V followed by acetylation. Compd. IV was used for the prepn. of 3'-azido-2',3'-dideoxy-D-arabino-hexofuranosyl nucleosides, e.g., VI.

IT **139545-71-4P 139545-72-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and deprotection of)

RN 139545-71-4 CAPLUS

CN Propanamide, N-[1-(6-O-acetyl-5-O-benzoyl-2,3-dideoxy-.beta.-D-erythro-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]-2-methyl- (9CI) (CA INDEX NAME)

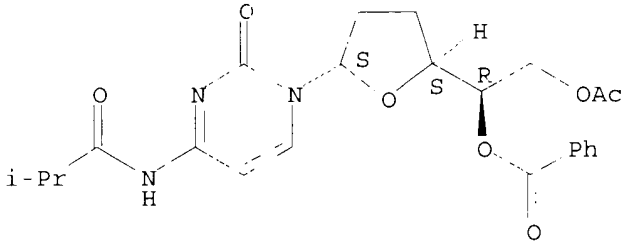
Absolute stereochemistry.



RN 139545-72-5 CAPLUS

CN Propanamide, N-[1-(6-O-acetyl-5-O-benzoyl-2,3-dideoxy-.alpha.-D-erythro-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]-2-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2002 ACS

AN 1984:22953 CAPLUS

DN 100:22953

TI Synthesis of 1-(5-deoxy-.beta.-D-arabino-hexafuranosyl)cytosine

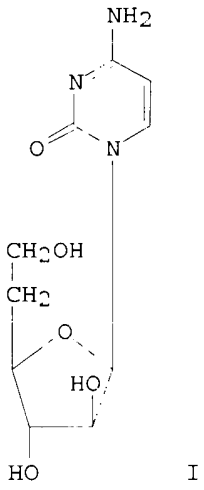
AU Iwakawa, Masaharu; Martin, Olivier R.; Szarek, Walter A.

CS Carbohydr. Res. Inst., Queen's Univ., Kingston, ON, K7L 3N6, Can.

SO Carbohydr. Res. (1983), 121 99-108
CODEN: CRBRAT; ISSN: 0008-6215

DT Journal

LA English
GI



I

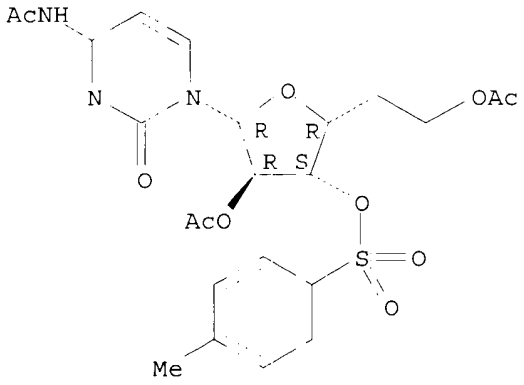
AB The title compd. (4'-homoara-C; I), a higher homolog of the antileukemic agent 1-.beta.-D-arabinofuranosylcytosine, was prepd. by two independent routes. The first one involved the inversion of configuration at C-2' of [1-(5-deoxy-.beta.-D-ribo-hexofuranosyl)cytosine, 4'-homocytidine] by the diphenylcarbonate technique; the 5-deoxy-D-ribo-hexofuranosyl moiety of 4'-homocytidine was obtained by way of an anti-Markovnikov addn. of iodine trifluoroacetate to the double bond of 5,6-dideoxy-1,2-O-isopropylidene-3-O-p-tolylsulfonyl-.alpha.-D-ribo-hex-5-enofuranose and redn. of the resulting iodide(s). In the second approach, 5-deoxy-1,2-O-isopropylidene-3-O-p-tolylsulfonyl-.beta.-D-xylo-hexofuranose was acetylated and condensed with 4-N-bis(trimethylsilyl)cytosine, and alk. treatment gave I by way of an anhydro intermediate. The structure of I, in particular the configuration at C-2', was confirmed by its 1H- and 13C-NMR spectra.

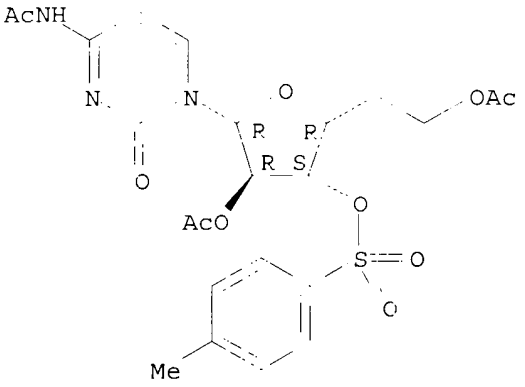
IT **88238-37-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and conversion of, to (deoxy-arabino-hexofuranosyl)cytosine)

RN 88238-37-3 CAPLUS

CN Acetamide, N-[1-[2,6-di-O-acetyl-5-deoxy-3-O-[(4-methylphenyl)sulfonyl]-.beta.-D-xylo-hexofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

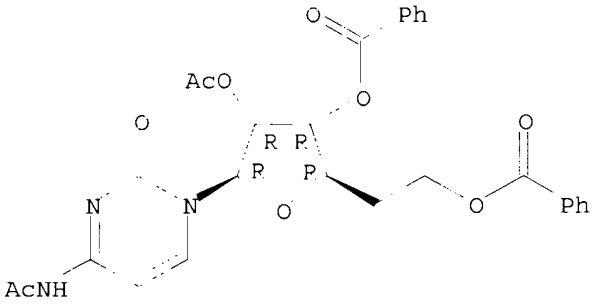
Absolute stereochemistry.





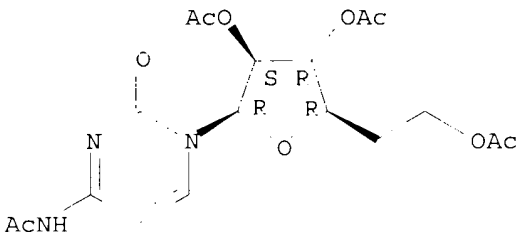
IT **55085-33-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and deacylation of)
RN 55085-33-1 CAPLUS
CN Acetamide, N-[1-(2-O-acetyl-3,6-di-O-benzoyl-5-deoxy-.beta.-D-ribo-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **88238-39-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 88238-39-5 CAPLUS
CN Acetamide, N-[1,2-dihydro-2-oxo-1-(2,3,6-tri-O-acetyl-5-deoxy-.beta.-D-arabino-hexofuranosyl)-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



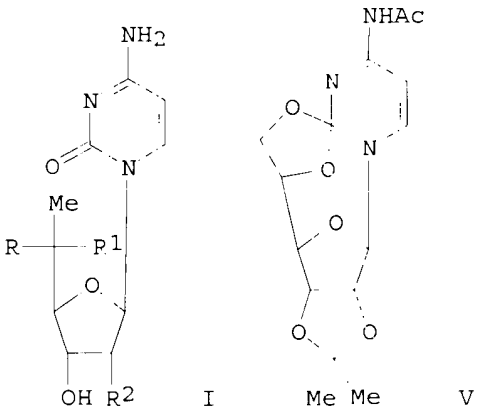
L5 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2002 ACS
AN 1982:200076 CAPLUS
DN 96:200076
TI Synthesis of the two epimeric 5'-methylcytidines, their 5'-phosphates and [5-3H]-5'-pyrophosphates, and the two 5'-methyldeoxycytidines. A novel

cystosine anhydronucleoside with two oxygen bridges between the base and the sugar

AU David, Serge; De Sennyey, Gerard
CS Lab. Chim. Org. Multifonct., Univ. Paris-Sud, Orsay, 91405, Fr.

SO J. Chem. Soc., Perkin Trans. 1 (1982), (2), 385-93
CODEN: JCPRB4; ISSN: 0300-922X
DT Journal
LA English

GI



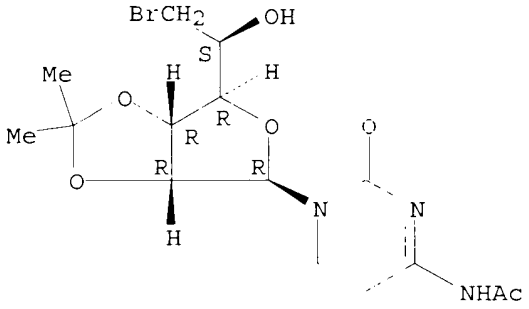
I Me Me V

AB The epimeric cytidine homologs I (R = OH, R1 = H; R = H, R1 = OH)(R2 = OH) (II and III, resp.) were prepd. in 4 steps from Me 2,3-O-isopropylidene-.beta.-D-allo- and -.alpha.-L-talofuranoside, resp. Acetalization of II and III with Me2CO followed by condensation with .beta.-cyanoethyl phosphate gave the 5'-phosphates I (R = OPO3H2, R1 = H; R = H, R1 = OPO3H2)(R2 = OH) which were converted into the corresponding pyrophosphates (IV) by the method of M. Michelson (1964). IV were labeled at C-5 by bromination followed by catalytic redn. in T. The (dideoxyhexofuranosyl)cytidines I (R .noteq. R1 = OH, H, R2 = H) were prepd. from II and III, resp., in 6 steps. The novel anhydronucleoside V was prepd. from 4-N-acetyl-2',3'-O-isopropylidenecytidine by sequential oxidn., condensation with dimethylsulfoxonium methylide, and treatment with BF3-Et2O in THF.

IT **81748-23-4P 81748-24-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and acetylation of)

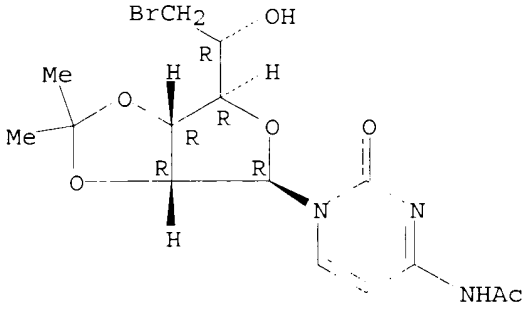
RN 81748-23-4 CAPLUS
CN Acetamide, N-[1-[6-bromo-6-deoxy-2,3-O-(1-methylethylidene)-.beta.-D-allofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



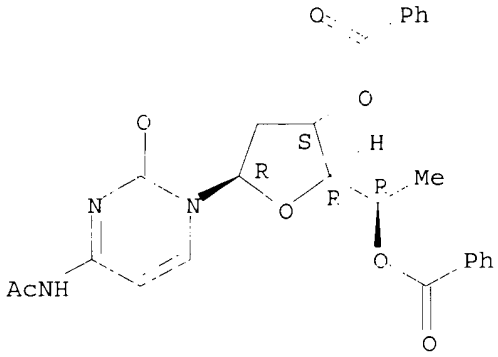
RN 81748-24-5 CAPLUS
CN Acetamide, N-[1-[6-bromo-6-deoxy-2,3-O-(1-methylethylidene)-.alpha.-L-talofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



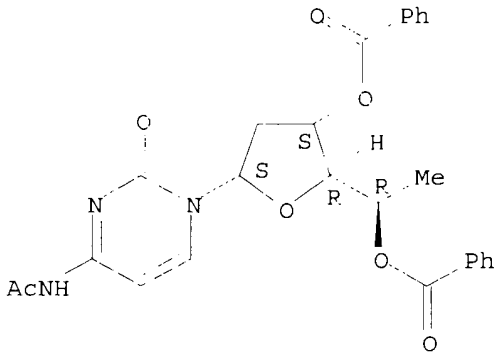
IT **81715-11-9P 81715-12-0P 81715-19-7P**
81715-22-2P 81748-08-5P 81754-91-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and methanolysis of)
RN 81715-11-9 CAPLUS
CN Acetamide, N-[1-(3,5-di-O-benzoyl-2,6-dideoxy-.beta.-D-ribo-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



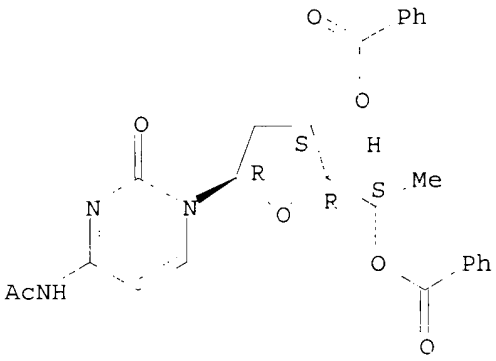
RN 81715-12-0 CAPLUS
CN Acetamide, N-[1-(3,5-di-O-benzoyl-2,6-dideoxy-.alpha.-D-ribo-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



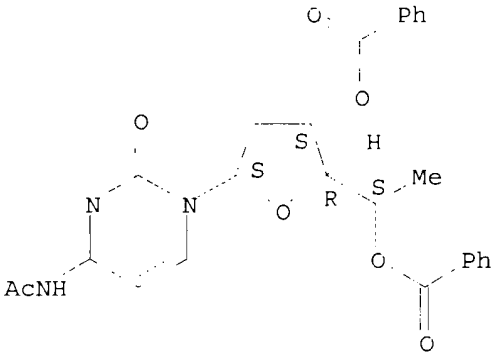
RN 81715-19-7 CAPLUS
CN Acetamide, N-[1-(3,5-di-O-benzoyl-2,6-dideoxy-.alpha.-L-lyxo-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



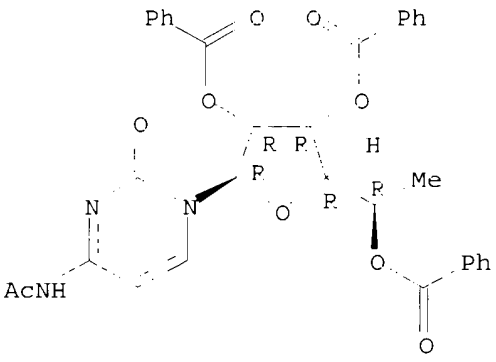
RN 81715 22-2 CAPLUS
CN Acetamide, N-[1-(3,5-di-O-benzoyl-2,6-dideoxy-.beta.-L-lyxo-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 81748-08-5 CAPLUS
CN Acetamide, N-[1,2-dihydro-2-oxo-1-(2,3,5-tri-O-benzoyl-6-deoxy-.beta.-D-allofuranosyl)-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

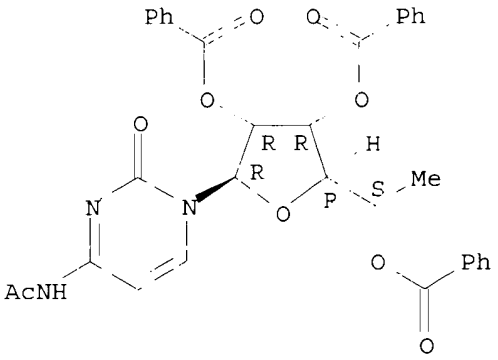
Absolute stereochemistry.



RN 81754-91-8 CAPLUS

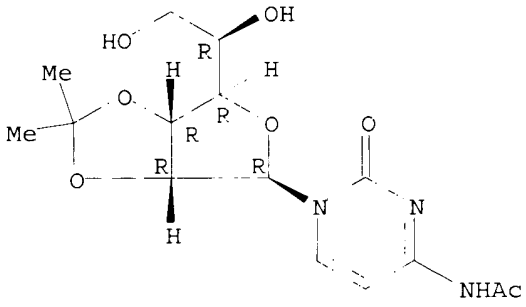
CN Acetamide, N-[1,2-dihydro-2-oxo-1-(2,3,5-tri-O-benzoyl-6-deoxy-.alpha.-L-talofuranosyl)-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



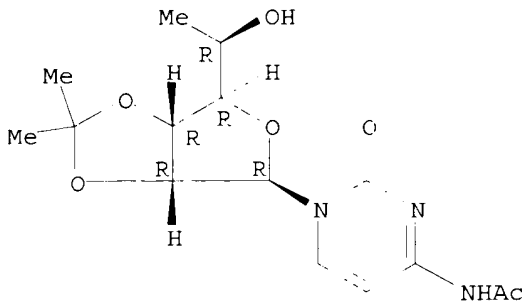
IT **79974-65-5P 81748-25-6P 81748-26-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 79974-65-5 CAPLUS
CN Acetamide, N-[1,2-dihydro-1-[2,3-O-(1-methylethylidene)-.beta.-D-allofuranosyl]-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



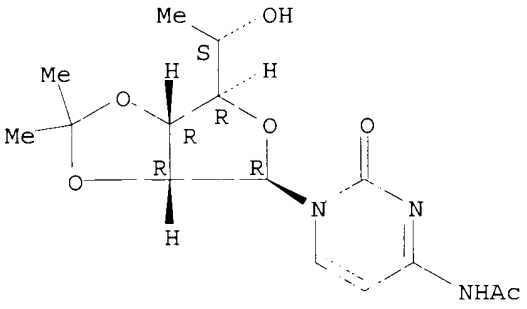
RN 81748-25-6 CAPLUS
CN Acetamide, N-[1-[6-deoxy-2,3-O-(1-methylethylidene)-.beta.-D-allofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



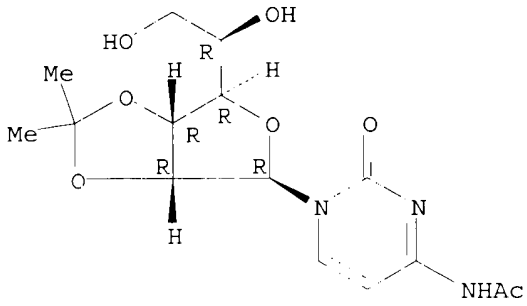
RN 81748-26-7 CAPLUS
CN Acetamide, N-[1-[6-deoxy-2,3-O-(1-methylethylidene)-.alpha.-L-talofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2002 ACS
AN 1981:620256 CAPLUS
DN 95:220256
TI Synthesis and x-ray crystal structure of the first example of an anhydronucleoside with two oxygen bridges between the base and the sugar
AU David, Serge; De Sennyey, Gerard; Pascard, Glaudine; Guilhem, Jean
CS Lab. Chim. Org. Multifonct., Univ. Paris-Sud, Orsay, 91405, Fr.
SO J. Chem. Soc., Chem. Commun. (1981), (15), 780-1
CODEN: JCCCAT; ISSN: 0022-4936
DT Journal
LA English
GI For diagram(s), see printed CA Issue.
AB Oxidn. of the protected cytidine I (R = CH2OH) (II) followed by condensation with dimethyloxosulfonium methylide gave a mixt. of epoxides I (R = epoxyethyl) (III). On treatment with F3B-OEt2 (THF, room temp., 5 min) III isomerized to give the anhydronucleoside IV in 18% overall yield from II. The structure of IV was detd. by x-ray crystallog. anal. and spectral methods.
IT **79974-65-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 79974-65-5 CAPLUS
CN Acetamide, N-[1,2-dihydro-1-[2,3-O-(1-methylethylidene)-.beta.-D-allofuranosyl]-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

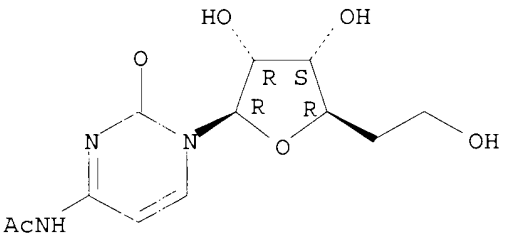
Absolute stereochemistry.



L5 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2002 ACS
AN 1980:129224 CAPLUS
DN 92:129224
TI Synthesis of 1-(5-deoxy-.beta.-D-ribo-hexofuranosyl)cytosine and 1-(2,5-dideoxy-.beta.-D-erythro-hexofuranosyl)cytosine and of their phosphates. Study of the specificity of a mammalian (rat) ribonucleotide

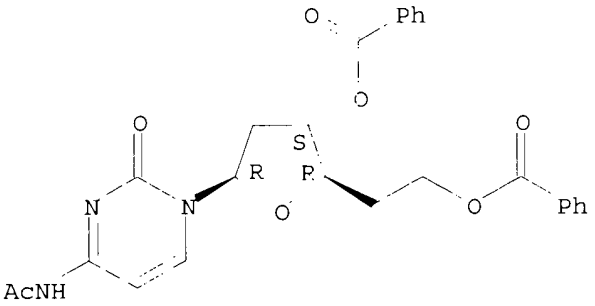
reductase
AU David, Serge; De Sennyey, Gerard
CS Lab. Chim. Org., Univ. Paris-Sud, Orsay, 91405, Fr.
SO Carbohydr. Res. (1979), 77, 79-97
CODEN: CRBRAT; ISSN: 0008-6215
DT Journal
LA French
AB Mild, acidic hydrolysis of 3-O-benzoyl-1,2:5,6-di-O-isopropylidene-.alpha.-D-allofuranose gave a diol that was selectively benzoylated at O-6 in high yield by intermediate conversion to the stannylene deriv. The 3,6-dibenzoate was converted to the 5-O-tosyl deriv. and thence to a mixt. of iodides, which were reduced with Bu3SnH to 3,6-di-O-benzoyl-5-deoxy-1,2-O-isopropylidene-.alpha.-D-ribohexofuranose I. Acetolysis gave an anomeric mixt. of diacetates, which, when treated with N-acetylbis(trimethylsilyl)cytosine gave the protected nucleoside, which was deprotected to free "homocytidine", 1-(5-deoxy-.beta.-D-ribo-hexofuranosyl)cytosine II, by alk. methanolysis. This was N-acetylated and then treated with Me2CO to give a protected nucleoside, which was labeled by oxidn. to the aldehyde, redn. with sodium borotritide, and deprotection. Acidic methanolysis of I gave a mixt. of Me 2,6- and 3,6-di-O-benzoylfuranosides, the OH groups of which were treated with CCl4-Ph3P reagent to give the 2-chloro-2-deoxy III and 3-chloro-3-deoxy derivs. Redn. of III gave Me 3,6-di-O-benzoyl-2,5-dideoxy-D-erythro-furanoside, further transformed in 1-(2,5-dideoxy-.beta.-D-erythro-hexofuranosyl)cytosine mixed with the .alpha. anomer. Phosphates and diphosphates of the nucleosides were prepd. by extensions of known methods. The phosphate and the diphosphate of II act neither as substrates nor as inhibitors of a ribonucleotide-reductase from rat ascites tumor.
IT **73045-63-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and acetylation of)
RN 73045-63-3 CAPLUS
CN Acetamide, N-[1-(5-deoxy-.beta.-D-ribo-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



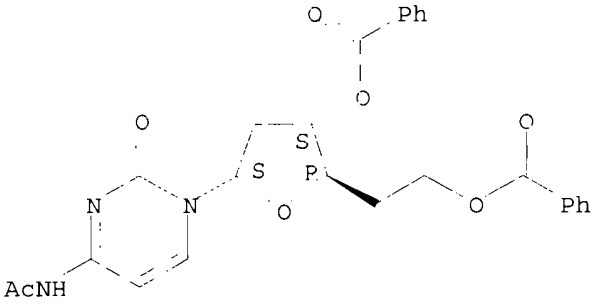
IT **61221-84-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and deacetylation of)
RN 61221-84-9 CAPLUS
CN Acetamide, N-[1-(3,6-di-O-benzoyl-2,5-dideoxy-.beta.-D-erythro-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



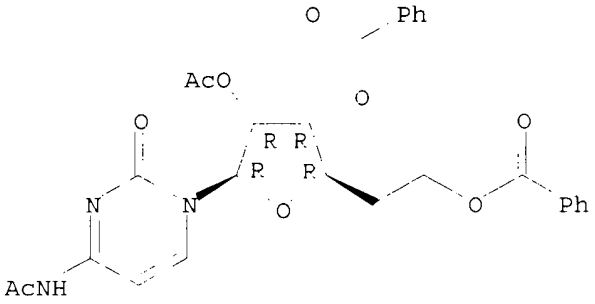
IT **61221-86-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and deacylation of)
RN 61221-86-1 CAPLUS
CN Acetamide, N-[1-(3,6-di-O-benzoyl-2,5-dideoxy-.alpha.-D-erythro-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



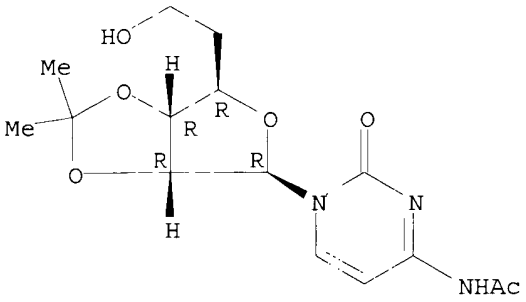
IT **55085-33-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and deprotection of)
RN 55085-33-1 CAPLUS
CN Acetamide, N-[1-(2-O-acetyl-3,6-di-O-benzoyl-5-deoxy-.beta.-D-ribo-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



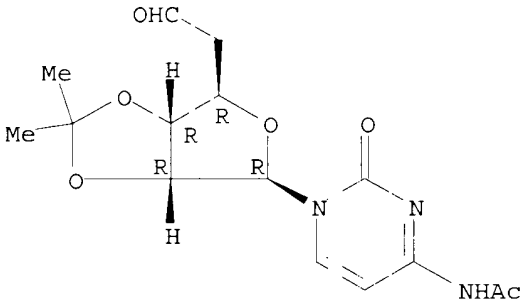
IT **73045-64-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and oxidn. of)
RN 73045-64-4 CAPLUS
CN Acetamide, N-[1-[5-deoxy-2,3-O-(1-methylethylidene)-.beta.-D-ribo-hexofuranosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

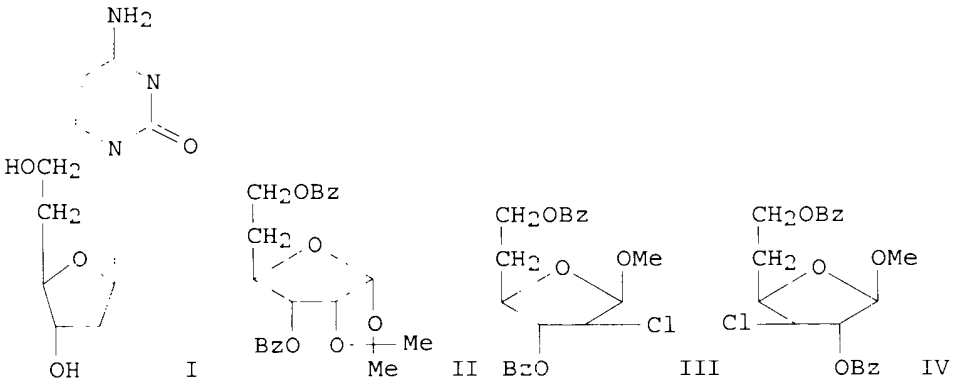


IT **73045-65-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 73045-65-5 CAPLUS
CN Acetamide, N-[1-[5-deoxy-2,3-O-(1-methylethylidene)-.beta.-D-ribo-hexodialdo-1,4-furanosyl]-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L5 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2002 ACS
AN 1977:5733 CAPLUS
DN 86:5733
TI The synthesis of 1-(2,5-dideoxy-.beta.-D-erythro-hexofuranosyl)cytosine (homodeoxycytidine)
AU David, Serge; De Sennyey, Gerard
CS Lab. Chim. Org. Multifonct., Univ. Paris-Sud, Orsay, Fr.
SO C. R. Hebd. Seances Acad. Sci., Ser. C (1976), 283(1), 21-3
CODEN: CHDCAQ
DT Journal
LA French
GI



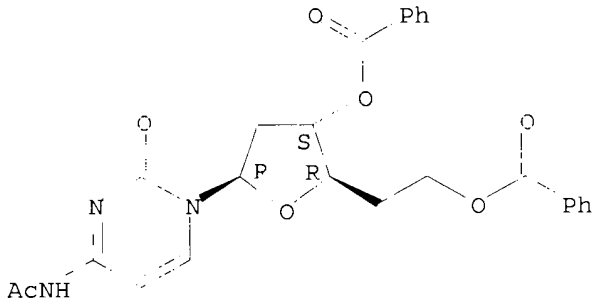
AB Homodeoxycytidine (I) and its .alpha.-anomer were prepd. from II in 5 steps via the chloro sugars III and IV, which were reduced with Bu3SnH and treated with bis(trimethylsilyl)-N-acetylcytosine, followed by cleavage of the protective groups.

IT **61221-84-9P 61221-86-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and protective group cleavage of)

RN 61221-84-9 CAPLUS

CN Acetamide, N-[1-(3,6-di-O-benzoyl-2,5-dideoxy-.beta.-D-erythro-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

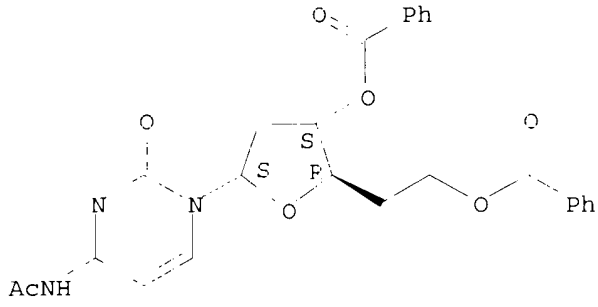
Absolute stereochemistry.



RN 61221-86-1 CAPLUS

CN Acetamide, N-[1-(3,6-di-O-benzoyl-2,5-dideoxy-.alpha.-D-erythro-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

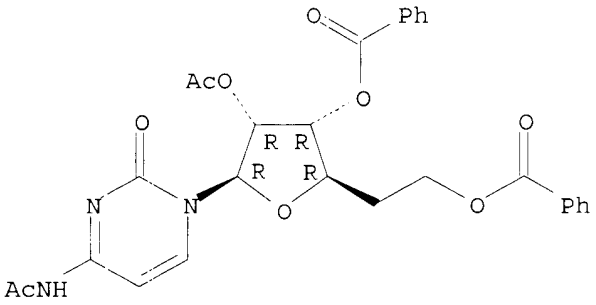
Absolute stereochemistry.



L5 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2002 ACS

AN 1975:86536 CAPLUS
DN 82:86536
TI Synthesis of 1-(5-deoxy-.beta.}-D-ribohexofuranosyl)cytosine and its 5-phosphate (homocytidylic acid)
AU David, Serge; De Sennyey, Gerard
CS Lab. Chim. Org. Multifonct., Univ. Paris-Sud, Orsay, Fr.
SO C. R. Hebd. Seances Acad. Sci., Ser. C (1974), 279(15), 651-4
CODEN: CHDCAQ
DT Journal
LA French
GI For diagram(s), see printed CA Issue.
AB Homocytidine (I, R-R2 = H) was prepd. by benzoylating II (R2 = H, R1R3 = CMe2O), hydrolyzing the protective group, again benzoylating to II (R1 = R2 = Bz, R3 = OH), tosylating, and treating with KI-(Me2N)3PO to give III (R1 = R2 = Bz, R3 = iodo), which was reduced and acetylated to IV. Treatment of IV with N-acetyl-bis(trimethylsilyl)-cytosine gave I (R = Ac, R1 = R2 = Bz), from which the blocking groups were removed with NaOMe. Treatment of I (R-R2 = H) with PCl3-P(OEt)3 gave I [R = R2 = H, R1 = P(O)(OH)2].
IT **55085-33-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and blocking group cleavage of)
RN 55085-33-1 CAPLUS
CN Acetamide, N-[1-(2-O-acetyl-3,6-di-O-benzoyl-5-deoxy-.beta.-D-ribo-hexofuranosyl)-1,2-dihydro-2-oxo-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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